

What is claimed is:

1. A method for printing wallpaper onto a web of media, comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path, there being a full width

5 printhead located across the media path, there being a processor which accepts operator inputs from one or more input devices and which controls the printer;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification;

running the printer according to the data;

10 printing a single roll of wallpaper, on demand, according to a selected pattern and configuration;

changing the pattern according to a new datum from an operator; and

then printing a new roll onto the same web.

2. The method of claim 1, further comprising the step of:

15 representing the pattern and the new pattern as symbols which can be captured as the data by an input device which communicates with the processor.

3. The method of claim 1, further comprising the step of:

storing to a storage device accessible to the processor and internal to the cabinet, a plurality of selectable files

20 for describing the patterns for printing onto the media.

4. The method of claim 1, further comprising the step of:

providing the printer with a video display for depicting the selected pattern.

25 5. The method of claim 4, further comprising the step of:

using the video display as a touchscreen input device to capture operator preferences.

6. The method of claim 1, further comprising the step of:

providing the printer with a scanner for capturing symbols that specify a selected pattern.

7. The method of claim 4, further comprising the step of:  
using the video display to display information that relates to a roll.

8. The method of claim 1, wherein:

- 5 printing a roll of wallpaper according to a selected pattern and the configuration further comprises inserting a blank core into a winding area, in or on the printer and accessible to an operator;  
affixing the web to the core;  
winding the web onto the core after the web has been printed on; and  
severing the wound core from the web.

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9. The method of claim 8, wherein:

winding the web is performed by winding a length of a printed web onto the core;  
the length being determined in advance;  
the length being specified by the data.

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10. The method of claim 8, wherein:

the core is contained in a closed tote during the winding.

11. The method of claim 9, wherein:

- 20 winding the web is further performed by slitting the web, within the printer, to one or more specified widths prior to winding;  
the one or more specified widths being specified by data, having been communicated through one of the input devices.

25 12. The method of claim 1, further comprising the step of:

providing one or more swatches of patterns;  
each swatch in a collection having a symbol which can be used as an operator input.

13. The method of claim 1, wherein:

- 30 the specification for an operator's requirements comprises a pattern and the configuration;

the configuration being one or more parameters selected from the group comprising: roll length, a roll slitting arrangement, one or more modifications to the pattern, or a selection of media to be printed on.

14. The method of claim 1, wherein utilizing an on-demand printer further comprises:

- 5 loading a re-usable media cartridge into the printer, the cartridge containing a unprinted web of media; and using a motor in the printer to drive a roller in the cartridge to advance the unprinted web into the path; automatically threading the media from the loading area, to the winding area.

15. The method of claim 1, wherein utilizing an on-demand printer further comprises:

- 10 loading a media tote into the winding area;  
winding a printed roll of wallpaper onto a core inside the tote when it is closed; and  
severing the printed roll on the core from the web.

16. The method of claim 1, wherein utilizing an on-demand printer further comprises:

- 15 loading an empty core into the winding area;  
winding a printed roll of wallpaper onto a core; and  
severing the printed roll on the core from the web using an automated cutting mechanism inside the printer, the cutting mechanism receiving a signal for commencing cutting from the processor.

- 20 17. The method of claim 1, wherein printing a roll of wallpaper according to a selected pattern further comprises:  
using a full width, stationary color inkjet type printhead to print onto the web while it is in motion along the path.

- 25 18. The method of claim 17, further comprising the step of:  
drying the web with hot air after it is printed on but before it is dispensed by the printer.

19. The method of claim 18, wherein drying further comprises:  
admitting the printed web as a hanging loop into a compartment in an internal dryer and exposing the web to a  
30 stream of heated air.

20. The method of claim 17, further comprising the step of:  
heating the web with a pre-heater platen located under the path before the web passes the printhead.
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21. A method as claimed in claim 1 wherein the web of media is printed by the printhead at a rate exceeding  
0.02 square meters per second (775 square feet per hour).
22. A method as claimed in claim 1 wherein the web of media is printed by the printhead at a rate exceeding  
10 0.1 square meters per second (3875 square feet per hour).
23. A method as claimed in claim 1 wherein the web of media is printed by the printhead at a rate exceeding  
0.2 square meters per second (7750 square feet per hour).
- 15 24. A method as claimed in claim 1 wherein the printhead has more than 7680 nozzles.
25. A method as claimed in claim 1 wherein the printhead has more than 20,000 nozzles.
26. A method as claimed in claim 1 wherein the printhead has more than 100,000 nozzles.
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27. A method as claimed in claim 1 wherein the printhead has more than 250,000 nozzles.
28. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 5  
picoliters.
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29. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 3  
picoliters.
30. A method as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 1.5  
30 picoliters.

31. A method as claimed in claim 1 wherein the printer is a self contained printer for producing rolls of wallpaper, the printer comprising:

a cabinet in which is located a media path which extends from a media cartridge loading area to a winding  
5 area;

a full width digital color printhead located in the media path;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

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32. A method as claimed in claim 1 wherein utilizing an on-demand printer further comprises:

loading a media cartridge into the printer, the media cartridge, comprising:

a case in which a roll of blank media may be deployed;

the case having two halves, hinged together, an area between the two halves, when closed, defining a media  
15 supply slot; and

the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.

33. A method as claimed in claim 1 further comprising the step of providing a consumer tote for carrying the  
20 roll of wallpaper, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings; and

the tote having an interior in which is located a disposable core which is aligned with the access openings.

34. A method as claimed in claim 1 wherein the printer has a transverse cutter, the transverse cutter  
25 comprising:

a chassis having end plates;

the end plates being separated to allow a web of media to pass between them;

the end plates supporting between them a cutting blade; and

the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes  
30 on an opposite side of the web.

35. A method as claimed in claim 1 wherein the printer has a slitting mechanism, the slitting mechanism comprising:
- a chassis having end plates;
- 5 the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them;
- one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitter having a cutting edge; and
- the slitting mechanism selectively engageable to either enter or not enter a path followed by the web
- 10 according to an input provided by an operator of the printer.
36. A method as claimed in claim 1 wherein the printer has a dryer, the dryer comprising:
- a compartment with a top opening for receiving a media web fed from the printer;
- a source of heated air located above the top opening for blowing heated air into the opening to dry printing on
- 15 the media web.
37. A method as claimed in claim 1 wherein the printer comprises:
- a cabinet in which is located a media path which extends from a media loading area to a winding area;
- a printhead located in the media path;
- 20 a processor which accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll; and
- the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer
- wherein,
- the length and design of the roll are determined by the operator inputs.
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38. A method as claimed in claim 1 further comprising the steps of:
- utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a winding area, there being a printhead located in the media path, a processor which accepts operator inputs from one or more input devices;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification for an operator's requirements; using the processor to operatively control the printer according to the data; and printing a single roll of wallpaper, on demand, according to a selected pattern.

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39. A method as claimed in claim 1 adapted for operating a wallpaper printing business, the method further comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

- 10 using one or more printer input devices which communicate with a processor to capture data regarding one or more customer's requirements; the data comprising at least a customer selected pattern; printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and charging a customer for the roll.

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40. A method as claimed in claim 1 adapted for operating a wallpaper printing franchise, the method further comprising the steps of:

providing to franchisees, an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

- 20 the printer having one or more printer input devices which communicate with a processor to capture data regarding one or more customer requirements, the data comprising at least a customer selected pattern; providing the franchisee with a collection of patterns in a digital storage medium that can be read by the printer; enabling the franchisee to print a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and obtaining or attempting to obtain a fee from the franchisee.

25 41. A method as claimed in claim 1 wherein the printer adapted to produce rolls of wallpaper, the printer comprising:

- 30 a frame in which is located a media path which extends from a media loading area to a winding area;

a printhead located across the media path;  
one or more input devices for capturing operator instructions;  
a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

- 5 the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

42. A method as claimed in claim 1 adapted for drying a moving web of media in a printer such as a wallpaper printer, the method further comprising the steps of:

loading the web in a path that traverses a compartment in a dryer within the printer, the compartment having

- 10 an opening across the top;

allowing the moving web to descend into the compartment, as required; and

blowing heated air from above the opening.

43. A method as claimed in claim 1 adapted for supplying a media web to a wallpaper printer, further comprising the steps of:

opening a reusable case;

placing into the case a core onto which has been located a supply roll of blank wallpaper media;

supporting the core for rotation within the case;

leading a free edge of the roll between a pair of rollers and past an edge of the open case; then

- 20 with the rollers located within the case and on either side of the web, closing the case and loading it into a printer.

44. A method as claimed in claim 1 wherein the printer has a printhead assembly which prints onto a moving web that follows a path, the assembly comprising:

- 25 a full width printhead located across the path;

the printhead comprising a color printhead which is at least as wide as the web;

the printhead being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.

45. A method as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper, the printer comprising:

a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot; a multi-color roll width removable printhead located in the housing and across the media path;

- 5 the printhead being supplied by separate ink reservoirs, the reservoirs connected to the printhead by a an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead; one or more input devices for capturing operator instructions; a processor which accepts operator inputs which are used to configure the printer for producing a particular roll.

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46. A method as claimed in claim 1 further comprising the step of providing a consumer tote for carrying the roll of wallpaper, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings; the tote having an interior in which is located a disposable core which is aligned with the access openings; 15 both openings exposing a moulded coupling, one coupling attached to each end of the core, at least one of the couplings being a driven coupling and adapted to engage a driving spindle that rotates the core.

47. A method as claimed in claim 1 wherein the printer is adapted to print onto a moving web, the printer comprising:

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a full width stationary printhead located on a rail along which it slides for service and removal; a number of replaceable ink reservoirs which supply the printhead with different inks; the printhead comprising a color printhead which is at least as wide as the web; and the printhead being supplied with the different inks through tubes which can be disconnected so the printhead 25 may be removed.

48. A method as claimed in claim 1 wherein the printer is a self threading printer for producing rolls of wallpaper, the printer comprising:

30 a media loading area adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide;

- a cabinet housing a media path which extends from the pilot guide to a printed media dispensing slot;
  - a printhead located across the media path;
  - a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;
- 5    a motor within the cabinet for advancing a media web out of the media cartridge; and
- one or more other motors adapted to urge the media along the path and out of the slot.
49. A method as claimed in claim 1 adapted for producing wallpaper on-demand, the method further comprising the steps of:
- 10   utilizing an on-demand printer comprising a cabinet in which is located a media path which passes a printhead on the way to a dispensing slot;
- selecting a pattern and a configuration;
- using one or more printer input devices which communicate with a processor to input the pattern and the configuration; and
- 15   printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration.